

Carlos Orellana

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Education

University of Virginia

Bachelor's Degree, Computer Science.

Relevant Coursework: Software Engineering, PL for Web Applications, Software Dev Essentials, Machine Learning.

Charlottesville, VA

Expected May 2026

Piedmont Virginia Community College

Associate's Degree, Computer Science.

Relevant Coursework: Data Structures and Algorithm, Computer Systems and Organization.

Charlottesville, VA

Aug 2022 – May 2024

Projects

Freelance Web Developer

- Designed and developed a responsive business website using HTML and CSS to create a clean and user-friendly interface.
- Implemented interactive features with JavaScript, including navigation menus and dynamic service sections, to improve customer engagement.
- Built a customer contact form using Node.js for backend handling and demonstrated familiarity with connecting forms to databases (SQL) for storing client inquiries.
- Applied modern web development practices, such as semantic HTML and mobile-first design, to ensure accessibility and cross-device compatibility.

Fitness, Diet Web App

- Developed an interactive web application that creates personalized diet plans based on user input, using HTML, CSS, and JavaScript.
- Designed a multi-step questionnaire to collect user data (age, weight, goals, dietary preferences) and generate tailored meal recommendations.
- Implemented dynamic charts and progress tracking features, enabling users to monitor their diet and update information over time.
- Demonstrated familiarity with backend concepts (Node.js and SQL) by structuring the application to support storing and retrieving user data.

Drone Stabilization with Reinforcement Learning

- Built and trained a neural network in Python to stabilize a 2D drone using reinforcement learning techniques.
- Applied AI frameworks including PyTorch and TensorFlow to design and optimize actor-critic models for flight control.
- Developed a custom simulation environment to train the drone to reach and hover near target positions.
- Integrated a simple Django-based dashboard to visualize training logs and performance metrics during model development.

E-Commerce Web Application (Amazon Clone)

- Designed and implemented an e-commerce website inspired by Amazon, using HTML and CSS to build the user interface.
- Developed shopping cart functionality in JavaScript, allowing users to add, remove, and update products dynamically.
- Implemented an order tracking feature to simulate package delivery status updates through a tracking page.
- Built a checkout process with a confirmation page to demonstrate the full purchase workflow.

Skills & Interests

Technical: HTML, CSS, JavaScript, React, Node.js, Next.js, Python, Django, Java, MySQL.

Language: English, Spanish.